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Amendment
Attorney Docket No. S63.2Q-13017-US04

Remarks

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This Amendment is in response to the Office Action dated January 19, 2006. In the Office Action claims 31-32, 40-46, 66-68 and 76 were rejected under 35 USC 112; the specification was objected to as failing to provide proper antecedent basis for the claimed subject matter; claims 31-32, 40-46, 66-68 and 76 were rejected under 35 USC 102(e) as being anticipated by Evans et al (5,709,713); and claims 31-32, 40-46, 66-68 and 76 were rejected under 35 USC 102(e) as being anticipated by Chuter (5,725,547).

For reasons presented herein, Applicant has traversed the rejections and respectfully asserts that the claims are in condition for allowance.

The paragraph numbers below correspond to those of the Office Action.

35 USC 112

In the Office Action, claims 31-32, 40-46, 66-68 and 76 were rejected under 35 USC 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention. The Office Action states that "selected ones of the crossing points" in claim 31 is ambiguous and not supported. The Office Action also states that "at a number of selected ones of the crossing points" is ambiguous and not supported.

Applicant disagrees with both assertions. To further prosecution, Applicant has amended instant independent claims 31, 43 and 66 so it is grammatically clearer yet has the same meaning. Figure 1 teaches that a crossing point 8 occurs where one parallel wire 2 crosses a second parallel wire 3. Looking at the stent of Fig. 1, the stent has a plurality of crossing points 8. Some of the crossing points 8 are deformed in order form an elevation 7, as shown in Fig. 2. Some of the crossing points 8 are not deformed and do not form an elevation 7, as shown in Figs.

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1, 3, 4, 6 and 7 where the stent has elevated portions and non-elevated portions. The pattern of the elevation can be helical, as shown in Figs. 1 and 6, an annular pattern, as shown in Figs. 3 and 7 or parallel axial elevations, as shown in Fig. 4. Thus, the application teaches that the elevation pattern formed depends upon the crossing points selected to be “deformed locally” and that the number of selected crossing points to be “deformed locally” is less than the total number of crossing points. This idea is stated in claim 43 as: “at a number of selected crossing points ... each of the first wire and the second wire is shaped to form respective first and second elevations ... said elevations arranged in at least one elevation pattern.”

In the Office Action, claims 31-32, 40-46, 66-68 and 76 were rejected under 35 USC 112 as failing to comply with the written description requirement. The Office Action asserts that the phrase of claims 31, 43 and 66, “wherein selected ones of the crossing points ... is extended away from the braided tubular,” is not supported.

The entire clause at issue in claim 31 is “wherein at selected crossing points, each of the first wire and the second wire is shaped to form an elevation extended away from the braided tubular wall in a selected direction radially of the braided tubular wall.” Support for the phrase “at selected crossing points” is discussed above.

Support for the phrase “braided tubular wall” can be found at least in the first sentence of the first paragraph of the detailed description on page 6 which states that the stent is “a flexible self-expanding braided tubular wall 1 ... composed of a first plurality of parallel spring stainless steel wires 2 helically wound in a first direction crossing a second plurality of parallel spring stainless steel wires 3 helically wound in a second direction opposite to the first one.”

Support for the phrase “each of the first wire and the second wire is shaped to

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form an elevation" can be found at least in the sentence just cited as well as the paragraph spanning pages 6-7 and Fig. 2, which illustrate and explain how an elevation 7 is formed by parallel wire 2 and parallel wire 3.

Support for the phrase "shaped to form an elevation extended away from the braided tubular wall in a selected direction radially of the braided tubular wall" can be found at least in the last paragraph of page 7 which states that "[a]lthough the elevations 7, 12 and 13 in the examples of Figures 1, 3 and 4 are formed outwardly on the tubular wall 1, they may also be formed inwardly on the tubular wall 1 or possibly provided in combination of outwardly and inwardly formed elevations."

Thus, the application provides support for all the elements of the clause of claim 31: "wherein at selected crossing points, each of the first wire and the second wire is shaped to form an elevation extended away from the braided tubular wall in a selected direction radially of the braided tubular wall."

The clause of claims 43 and 66 at issue is "wherein at a number of selected crossing points, said number being substantially less than the total number of crossing points, each of the first wire and the second wire is shaped to form respective first and second elevations extended in the same direction radially away from the braided tubular wall."

Support for the phrase "wherein at a number of selected crossing points, said number being substantially less than the total number of crossing points" is discussed above.

Support for "each of the first wire and the second wire is shaped to form respective first and second elevations extended in the same direction radially away from the braided tubular wall" can be found at least in Fig. 2. Figure 2 illustration a crossing point 8 between parallel wire 2 and parallel wire 3. At the crossing point 8, parallel wire 2 forms a first

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elevation and parallel wire 3 forms a second elevation. Both the first elevation and second elevation are extended outwardly from the braided tubular wall, thus "each of the first wire and the second wire is shaped to form respective first and second elevations extended in the same direction radially away from the braided tubular wall."

Thus, the application provides support for the elements of the clauses of claims 43 and 66: "wherein at a number of selected crossing points, said number being substantially less than the total number of crossing points, each of the first wire and the second wire is shaped to form respective first and second elevations extended in the same direction radially away from the braided tubular wall."

Therefore, Applicant requests withdrawal of the 35 USC 112 rejection.

Specification

In the Office Action, the specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. As discussed above, the specification provides proper antecedent basis for the claimed subject matter, "selected ones" etc.

In addition, in the Office Action, the specification is objected to as failing to provide proper antecedent support for "wall segments." To further prosecution, Applicant has amended claims 66, 68, and 76 from "elongate wall segments" to "elongate wire segments" to clarify that segments of the wires form multiple crossing points etc. This amendment is supported by the specification. As discussed above, the stent is comprised of "a flexible self-expanding braided tubular wall 1, which is composed of a first plurality of parallel spring stainless steel wires 2 helically wound in a first direction crossing a second plurality of parallel spring stainless steel wire 3 helically wound in a second direction opposite to the first one" (first

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sentence of first paragraph of detailed description). It is inherent that an object, such as a wire, can be divided into segments.

Therefore, for at least these reasons, Applicant requests withdrawal of the objection.

35 USC 102

In the Office Action, claims 31-32, 40-46, 66-68 and 76 were rejected under 35 USC 102(e) as being anticipated by Evans et al (5,709,713). As stated in MPEP 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicant asserts that Evans does not teach each and every element of independent claims 31, 43 and 66. Evans does not teach a wire, which is an element of independent claims 31, 43 and 66. Evans teaches that the helical elements 14 are "flat ribbons" (3:66-67; 4: 2-3; 6:14-15; 8:35-36 and Figs. 1-16). Furthermore, Evans does not teach elevations that are arranged in a helical elevation pattern on the tubular mesh wall, which is an element of independent claim 66. Figure 8 of Evans teaches elevations in the form of individual circumferential rings created by grooves to which an axially compressive force has been applied.

Since Evans does not teach every element of instant independent claims 31, 43, and 66, Evans does not anticipate the instant independent claims. Applicant requests withdrawal of the rejection.

In the Office Action, claims 31-32, 40-46, 66-68 and 76 were rejected under 35 USC 102(e) as being anticipated by Chuter (5,725,547).). As stated in MPEP 2131, "A claim is

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anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicant asserts that Chuter does not teach each and every element of independent claims 31, 43 and 66. Instant independent claims 31 and 43 state "a flexible self-expanding braided tubular wall comprising at least one first wire helically wound at a substantially constant first pitch and at least one second wire helically wound at a substantially constant second pitch different from the first pitch." The Office Action asserts that "substantially" in the phrase "substantially constant ... pitch" is undefined in the specification. Applicant disagrees with this assertion and asserts that Figs. 1, 3, 4, 6 and 7 illustrate "at least one first wire helically wound at a substantially constant first pitch and at least one second wire helically wound at a substantially constant second pitch different from the first pitch" as claimed in independent claims 31 and 43. When Fig. 2 of Chuter is compared to Fig. 1 of the instant application, it is apparent that the first and second wires in Chuter are not helically wound at a substantially constant pitch. The specification of Chuter supports this assertion by stating that "these limbs [of the stent] do not have a uniform orientation relative to the long axis of the stent, but rather bend back and forth ... [c]onsequently, the angle between the long axis of the limb and the long axis of the stent lumen is not constant" (4:6-11).

Since Chuter does not teach "a flexible self-expanding braided tubular wall comprising at least one first wire helically wound at a substantially constant first pitch and at least one second wire helically wound at a substantially constant second pitch different from the first pitch," Chuter does not anticipate either instant independent claim 31 or 43.

Furthermore, independent claim 31 states that "at selected crossing points, each of

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the first wire and the second wire is shaped to form an elevation extended away from the braided tubular wall." Independent claim 43 states that "each of the first wire and the second wire is shaped to form respective first and section elevations." Similarly, independent claim 66 states that "at a number of selected crossing points ... pairs of elongate wire segments crossing one another are shaped to form respective first and second elevations extended in the same direction radially away from the tubular mesh wall."

Chuter does not teach that at selected crossing points, each of the first wire and the second wire is shaped to form an elevation or first and second elevations. In Chuter, the stent limbs "define a series of rings of transversely oriented sections (24) and longitudinal oriented section (26) which will have varying diameters depending upon the periodicity of such bends in the stent limbs and the degree of bending therein" (4:62-67). The bending referred to in Chuter is the limbs bending transversely or longitudinally from the longitudinal axis, as illustrated by stent limb 10 in Fig. 1 of Chuter and column 4, lines 3-9. Thus, the degree to which the stent limbs bend in a transverse direction within a particular section of the stent determines the diameter of that section of the stent.

Since Chuter does not teach "at selected crossing points, each of the first wire and the second wire is shaped to form an elevation extended away from the braided tubular wall," "each of the first wire and the second wire is shaped to form respective first and section elevations," or "pairs of elongate wire segments crossing one another are shaped to form respective first and second elevations," Chuter does not anticipate either instant independent claim 31, 43 or 66.

Therefore, for at least these reasons, independent claims 31, 43, and 66 are not anticipated by either Evans or Chuter. Applicants request withdrawal of the rejections.

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Conclusion

In light of the above comment, claims 31-32, 40-46, 66-68 and 76 are believed to be in condition for allowance. Notification to that effect is respectfully requested.

Respectfully submitted,

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